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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/785,232

02/25/2004

Tomoharu Muro

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04/20/2006

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EXAMINER

VIDWAN, JASJIT S

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/785,232             | MURO, TOMOHARU      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Jasjit S. Vidwan       | 2182                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date <u>4/5/06</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. ____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: ____.</p> |
|---|--|

  
**FRITZ FLEMING**  
 Supervisory PRIMARY EXAMINER  
 GROUP 2100  
 412191  
 4/14/2006

## DETAILED ACTION

### *Drawings*

1. Figures 4 and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 3, 4, 5, 6, 13, 14, 15, 16, 17, 18, 25, 26, 27, 28, 29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's admitted prior art (AAPA, Fig 4-7, Background of the Invention & Description of the Related Art).

4. **As per claim 1, 13 and 25**, AAPA teaches an apparatus having an inter-module data transfer confirming function comprising:

A first module **[Fig. 4, element 20, "host interface"]**

A second module **[Fig. 4, element 10, "Disk interface"]**

A Bridge module **[Fig 4, element 40, "PCI Bridge Module"]** connected said first module and said second module through interface busses **[51, 52]** to connect said first module and said second module to each other so that data can be transferred between said first module and said second module **[Page 3, Lines 15-22]**; and

A confirmation code setting **[41]** means for setting, in said bridge module, a confirmation code for confirming data transfer from said bridge module to said second module when said first module transfers data to said second module via said bridge module through said interface buses **[Page 8, Lines 15-21]**

Said first module comprising:

A descriptor setting means for setting a data transfer descriptor containing transfer information required for data transfer to said second module and a data transfer confirmation flag **[Page 8, Lines 22-27]**

A descriptor generating means for automatically generating, when said data transfer confirmation flag is "ON", a data transfer confirmation descriptor containing confirmation code reading information, which is required to read out said confirmation code from said bridge module to said first module, on the basis of said transfer information in said data transfer descriptor set by said descriptor setting means **[Page 9, Lines 1-12]**; and

A controlling means for controlling data transfer to said second module according to said transfer information, in said data transfer descriptor set by said descriptor setting means **[Page 9, Lines 13-20]** and for controlling, when said data transfer confirmation flag is "ON", after the data transfer to said second module is completed, reading of said confirmation code from said bridge module according to said confirmation code reading information in said data transfer confirmation descriptor automatically generated by said descriptor generating means **[Page 9, Lines 20-27]**

5. **As per claim 2, 14 and 26**, AAPA teaches an apparatus wherein first module comprises:

A first processing unit for generally managing said first module **[Fig. 5, element 11]**

A second processing unit for carrying out data transfer through said interface busses according to an instruction from said first processing unit **[Fig. 5, Element 14]**

First processing unit fulfilling function as said descriptor setting means **[Page 8, Lines 15-21]**

Second processing unit fulfilling functions as said descriptor generating means and said controlling means **[Page 5, Lines 23-27]**

6. **As per claims 3, 15, 27**, AAPA teaches an apparatus wherein the first module further comprises:

First determining means for determining whether data transfer between said bridge module and said second module has been carried out normally or abnormally, on the basis of said confirmation code read out from said bridge module **[Page 10, Lines 2-10]**

Second determining means for determining whether data transfer between said first module and said bridge module has been carried out normally or abnormally **[Page 10, Lines 2-10]**

7. **As per claims 4, 16, 28**, AAPA teaches an apparatus having an inter-module data transfer confirming function wherein when said first determining means determines that the data transfer has been carried out abnormally **[Page 11, Lines 7-14]**, said descriptor generating means automatically generates an error reading descriptor containing error reading information required to read out detailed error information from said bridge module to said first module **[Page 11, Lines 15-23]**, and said controlling means controls reading of said detailed error information from said bridge module according to said error reading information in said error reading descriptor automatically generated by said descriptor generating means **[Page 11, Lines 15-23]**

8. **As per claims 5, 17, 29**, AAPA teaches an apparatus wherein first module comprises:

A first processing unit for generally managing said first module **[Fig. 5, element 11]**

A second processing unit for carrying out data transfer through said interface busses according to an instruction from said first processing unit **[Fig. 5, Element 14]**

First processing unit fulfilling function as said descriptor setting means and said second determining means **[Page 8, Lines 15-21]**

Second processing unit fulfilling functions as said descriptor generating means and said controlling means and said first determining means **[Page 5, Lines 23-27]**

9. **As per claims 6, 18, 30**, AAPA teaches an apparatus wherein when said second determining means determining that the data transfer has been carried out abnormally, said first processing unit

obtains, from said second processing unit, said detailed error information read out from said bridge module **[Page 11, Lines 15-23]** and instructs said second processing unit to re-transfer the data on the basis of said detailed error information **[Page 11, Lines 15-23]**.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7, 8, 9, 10, 11, 12, 19, 20, 21, 22, 23, 24, 31, 31, 33, 34, 35, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and further in view of Takase et al, Patent Pub Date: 2001/0024448 **[herein after Takase]**.

12. **As per claims 7, 8, 9, 10, 11, 12, 19, 20, 21, 22, 23, 24, 31, 31, 33, 34, 35 and 36**, AAPA teaches the limitations of Claims 1, 13 and 25, however fails to teach a system wherein a plurality of data blocks are successively transferred from said first module to said second module, said descriptor setting means sets only said data transfer confirmation flag in a data transfer descriptor for transferring the last data block among said plurality of data blocks to "ON". However, Takase teaches the above limitation of transferring plurality of data together as one with a single error flag for the plurality of data packets **[Page 3, Paragraph 0028]**.

One of ordinary skill in the art at the time of Applicant's invention would have clearly recognized the advantage of combining the two teachings in order to allow acquisition of information about a plurality of data packets at one time **[Page 3, Paragraph 0025]**. It is for this reason that one of ordinary skill in the art at the time of Applicant's invention would have been motivated to combine AAPA with that of Takase in order to allow acquisition of information about a plurality of data packets at one time **[Page 3, Paragraph 0025]**.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasjit S. Vidwan whose telephone number is (571) 272-7936. The examiner can normally be reached on 8am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KIM HUYNH can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSV  
4/5/06

Supervisory  
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4/14/2006  
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